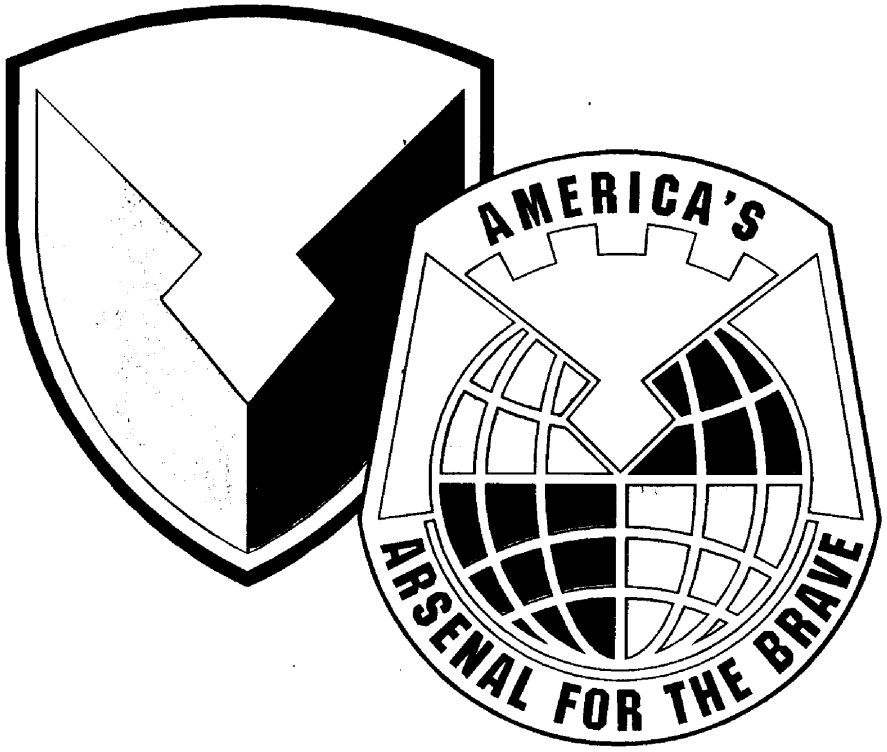
Presented by:
Brigadier General John Deyermond
DCS Ammunition

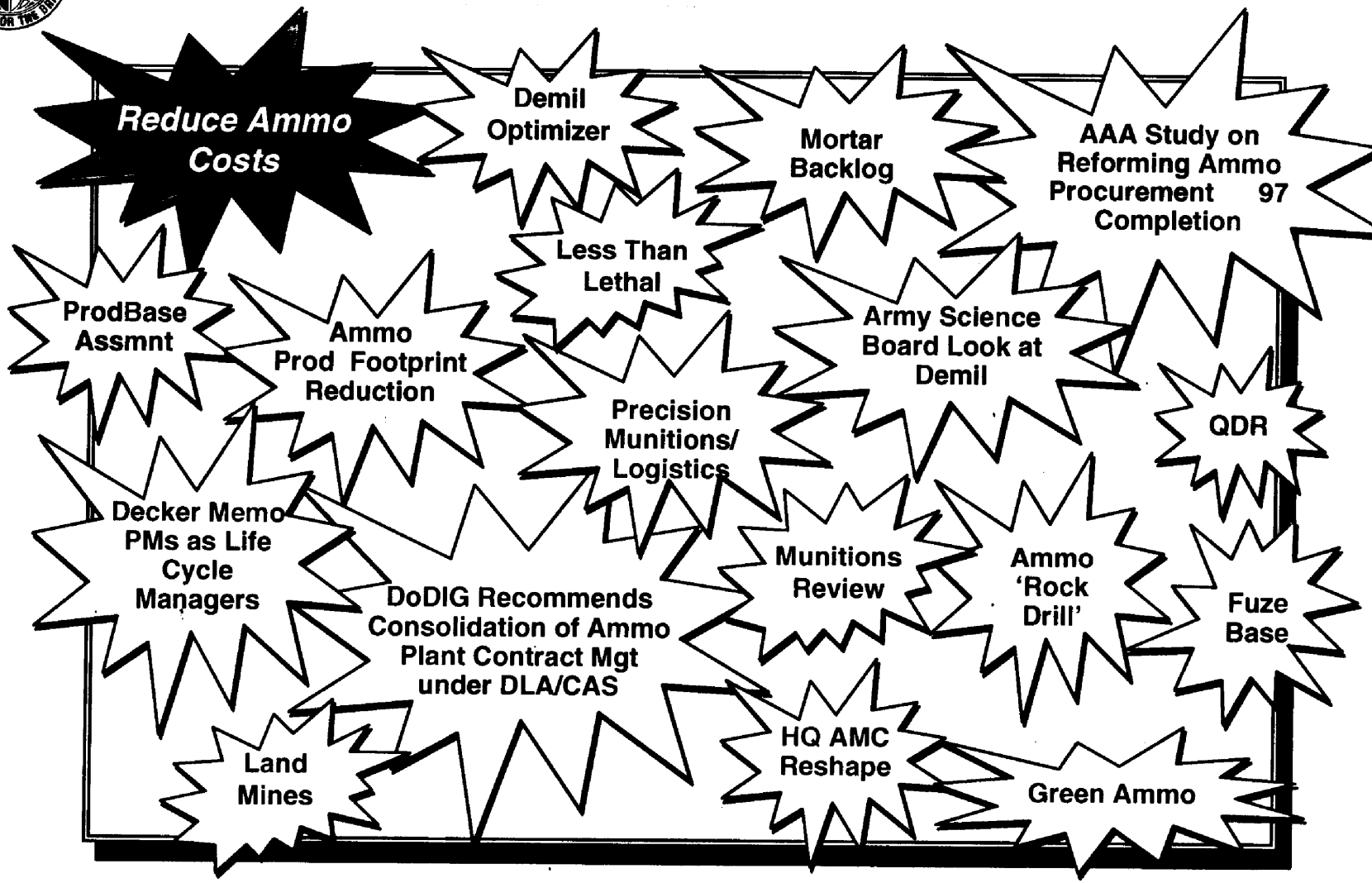
Army Materiel Command

Ammunition Update to MUNITIONS SUMMIT 15 September 1998



AMC – *Relevant, Responsive & Ready!*

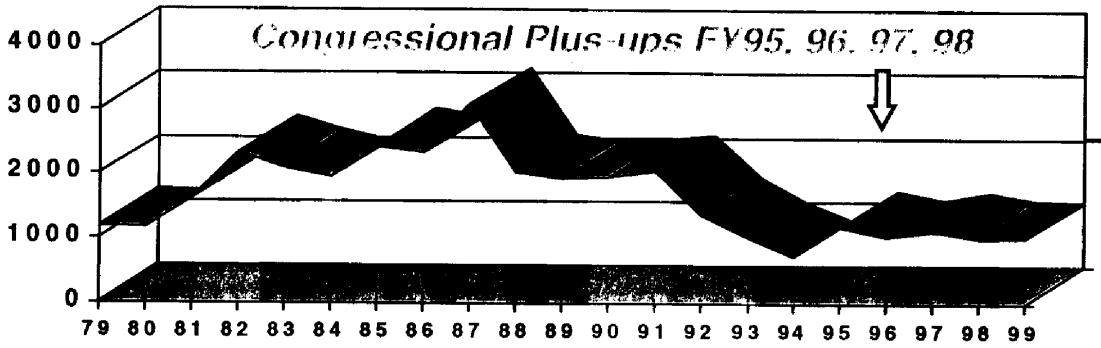
Current Ammo Issues



Ammunition is a busy business !!!

PAA - Funding Profile

PAA Historical Trend ($M)



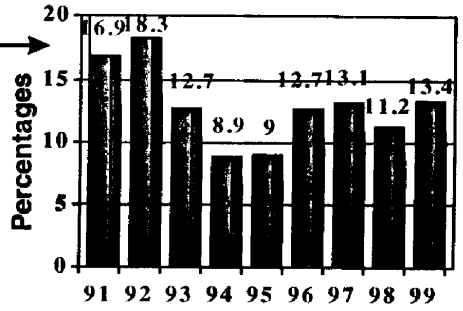
Today's Production Reflects Yesterday's Funding -

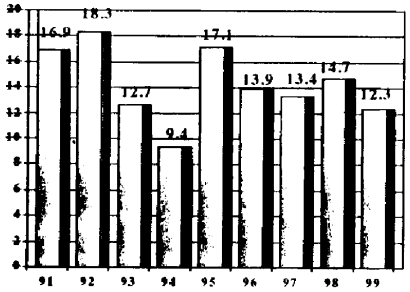
Procurement as a Percentage of Army Budget - FY98/FY99

Army Budget ($ in Millions)

APPROPRIATION	FY98	FY99
FAMILY HOUSING	1,292	1,256
MIL PERSONNEL	25,754	26,211
RDTE	4,511	4,487
MCA	597	707
OMA	20,656	20,468
PROCUREMENT	**6,752**	**8,373**
ERA	377	386
BRAC	400	524
TOTAL*	60,442	62,512

*Totals may not add due to rounding





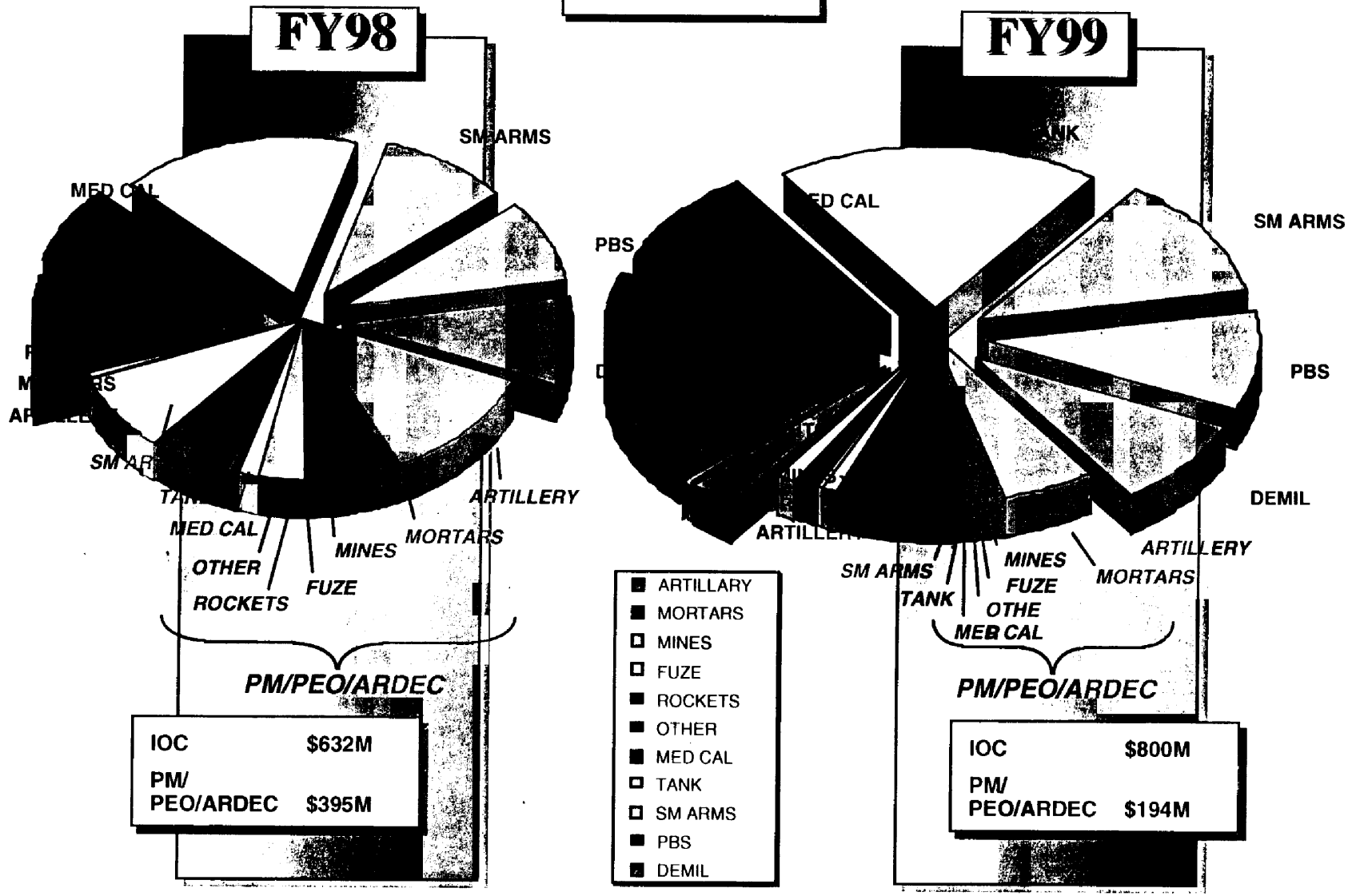
Procurement Appropriation ($ in Millions)

APPROPRIATION	FY98	FY99
AIRCRAFT	1323	1326
MISSILES	744	1206
WTCV	1291	1434
AMMUNITION	**1020**	**1009**
OTHER PROCUREMENT	2563	3[illegible]
TOTAL	6940	81[illegible]

Ammunition as a Percentage of The Procurement Budget - FY98/FY99

Army Ammo Funded Requirements

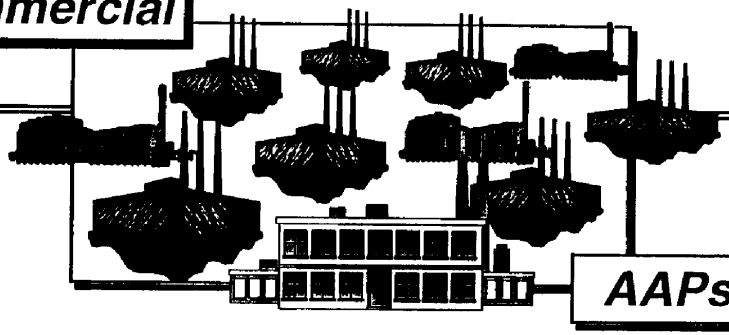
PAA



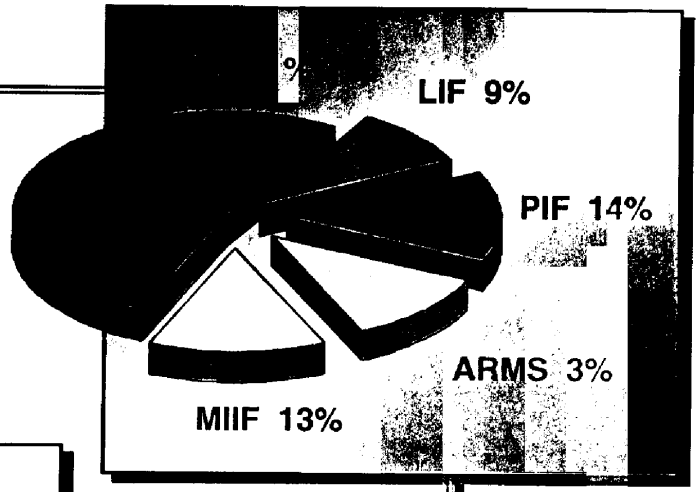
Ammunition Production Base

FY98-99 Budget

Commercial



AAPs



Activity 2 PAA Funding

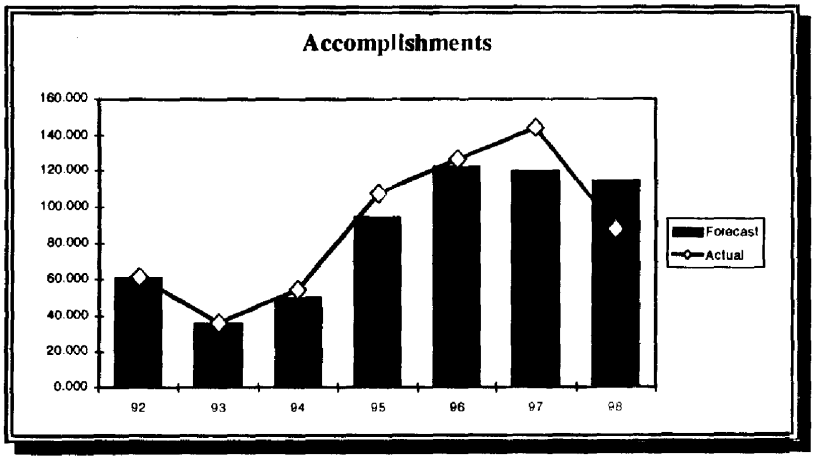
	$ Million FY98	FY99
Industrial Facilities (IF)	24.3	47.7
Layaway of Industrial Facilities (LIF)	16.4	15.3
Maintenance of Inactive Facilities (MIIF)	22.5	15.8
Conventional Ammo Demil	91.0	98.0
Arms Initiative	24.4	4.9
Totals ($ in Mil)	[illegible]	181.7

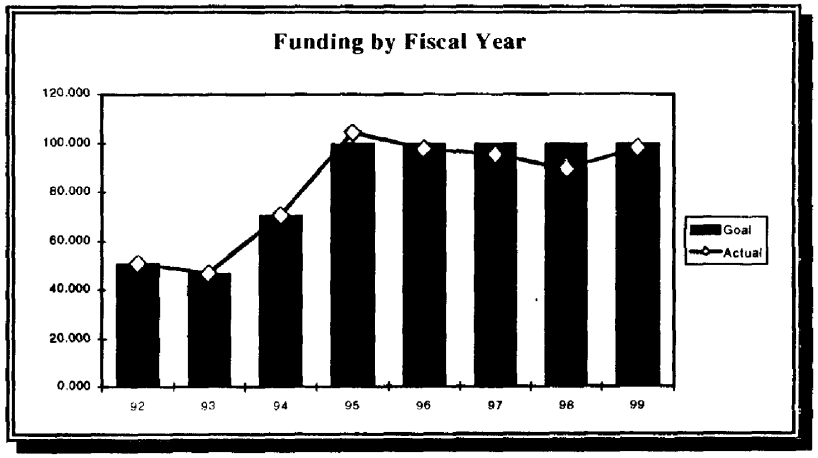
Challenge

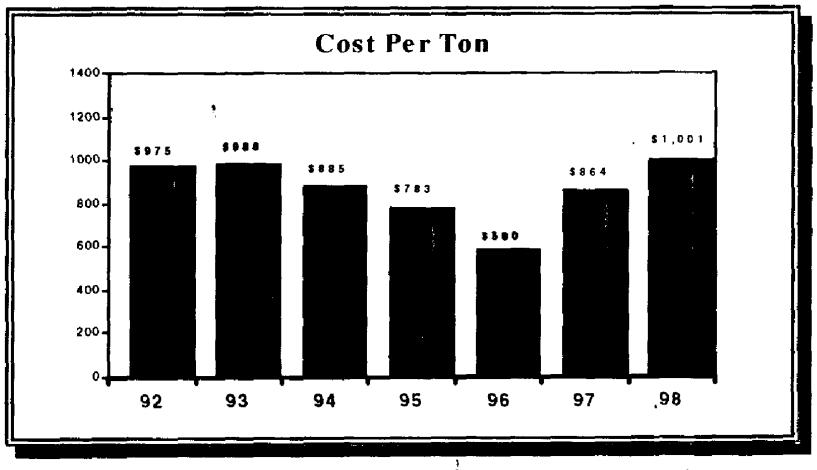
Production Base
vs.
Hardware

Ammunition Demilitarization

Accomplished/Forecast







Goals--

- Continue to avoid demilitarization through direct sales, FMS, cross-leveling between services and use in training whenever possible
- Execute a balanced program between destructive and non-destructive technologies
- Maintain a balance between government installations and the growing private industry capability
- Continue with our successes

Note 1: Cost spike during FY97 was due to greater than normal use of incineration @ approximately $2,000 per ton.

Note 2: Includes reimbursable projects.

(data as of 8/17/98)

CAWCF Closure

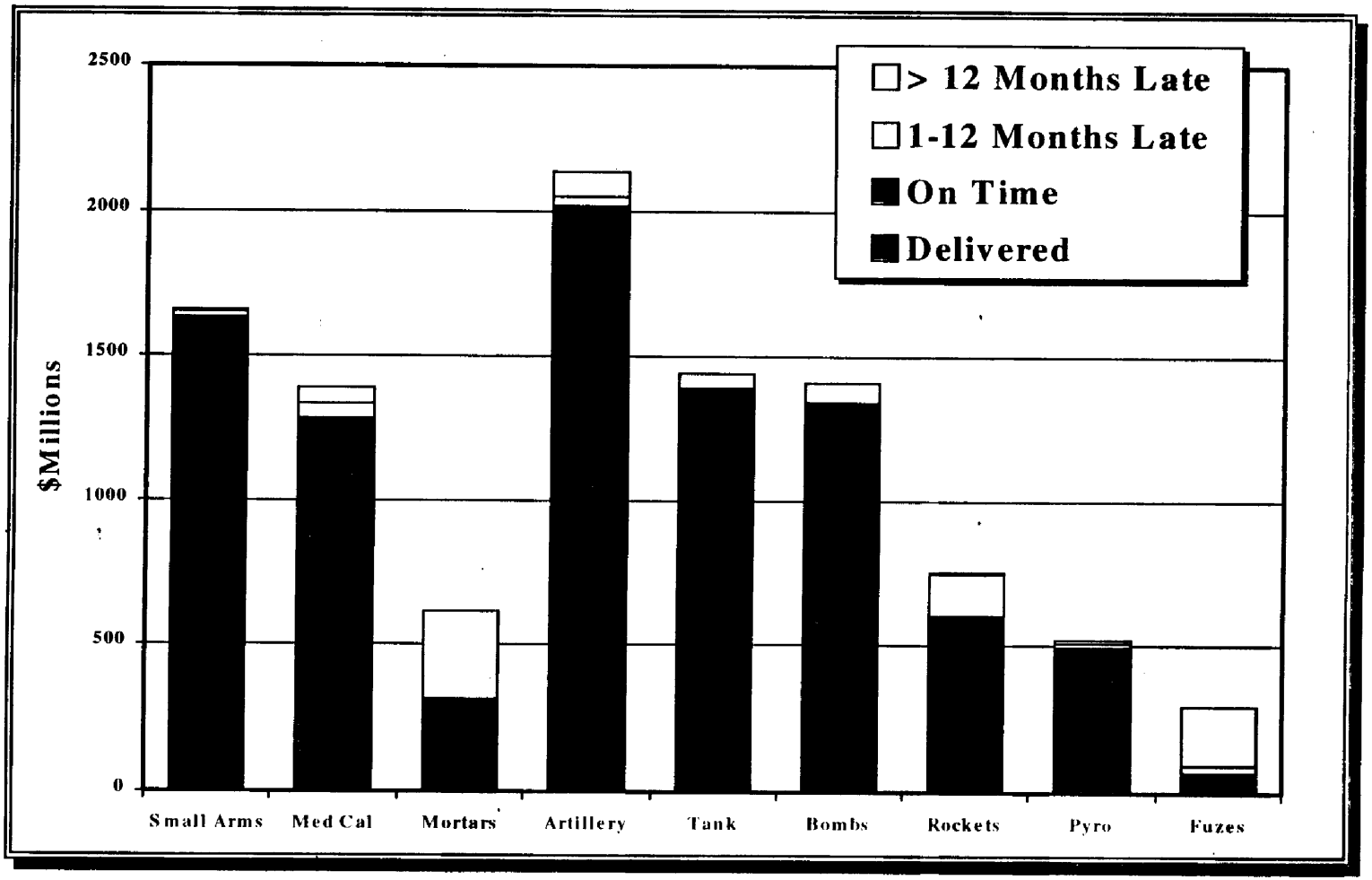
Direction/Plan

- *DOD Comptroller Directs CAWCF Close-out Beginning FY 99* [PBD 432, Nov 1996]
  - Separate Financial System for Ammunition Considered an Unnecessary Expense
  - Directed APIT Be Formed by OSD(A&T) To Determine Follow-on Procedures and Oversee CAWCF Closure
- *Army Develops Closure Plan*
  - All Orders Delivered and Fund Closed by FY05
  - Army Audit Agency to Validate Closure Cost
  - Plan Approved by All Services & OSD in May 97

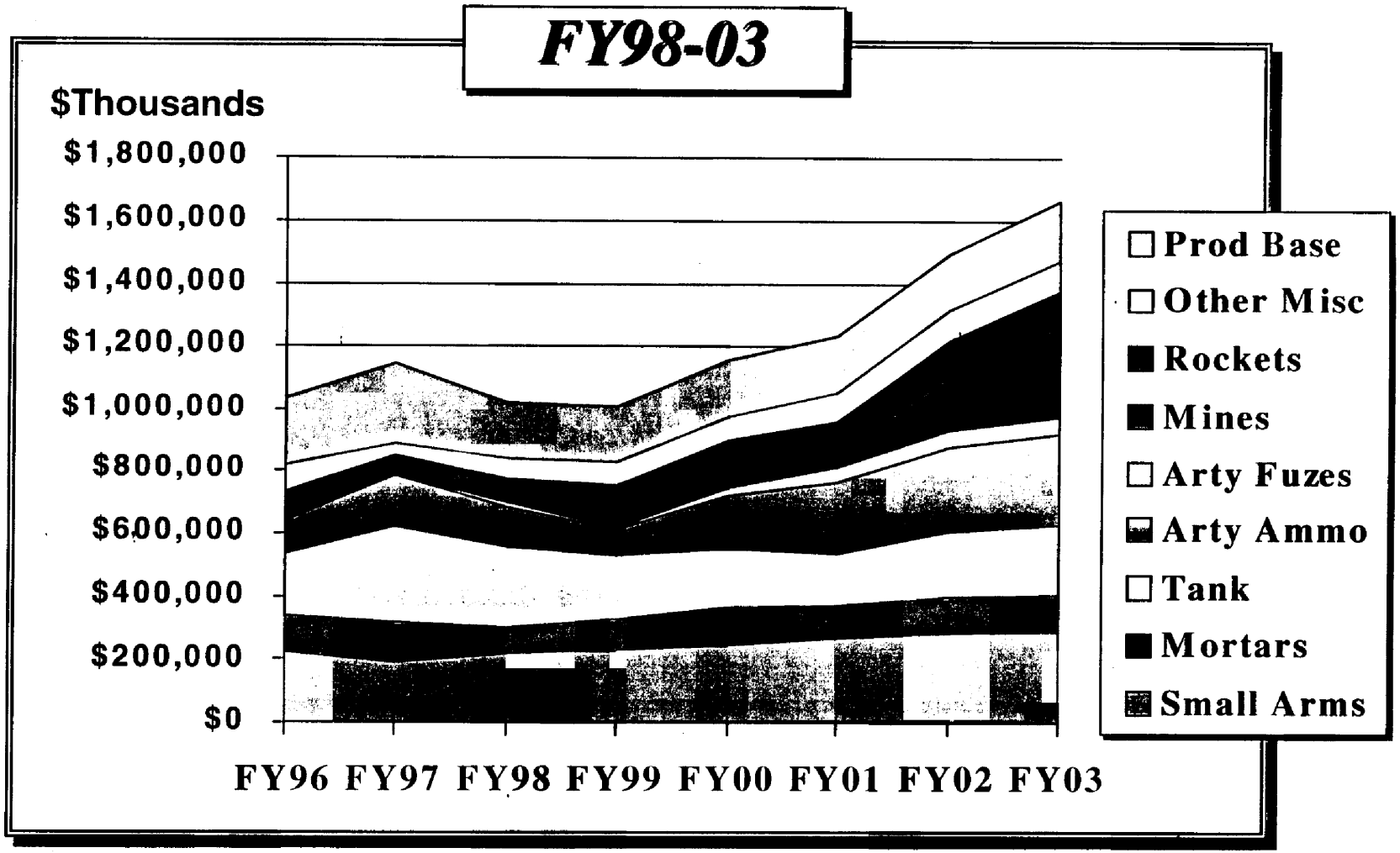
- ✔ *Fund Obligation Closely Scrutinized*
- ✔ *Accurate Pricing*
- ✔ *Reduce Lead Times*
- ✔ Fixed Price Contracts with Options
- ✔ Increased Systems/Bundle Buys

Work in Progress FY90-97 CAWCF Orders

as of 30 SEP 97

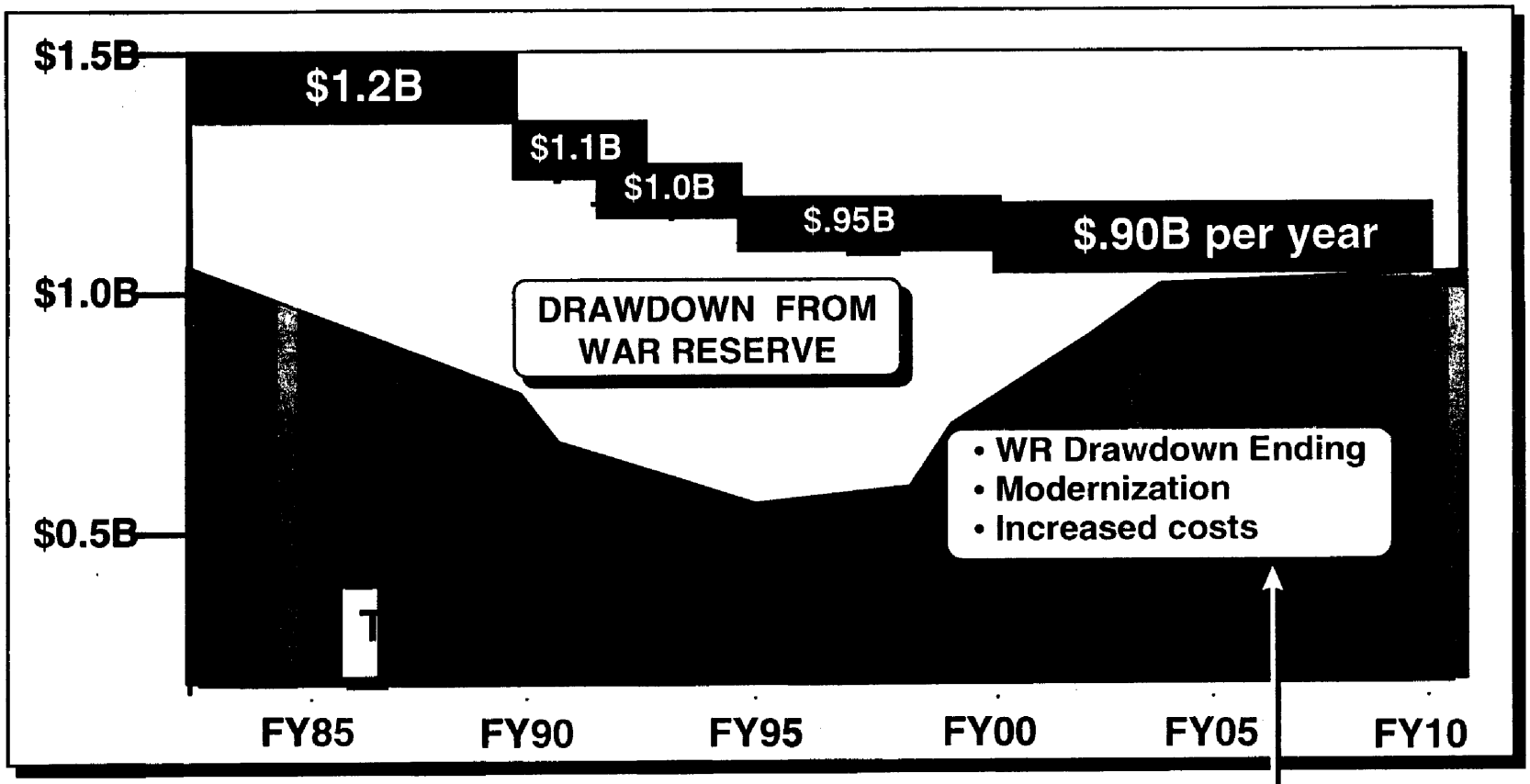


Ammunition Procurement Projection by Categories



Training Ammunition

Resource Trend



Training Ammo Procurement $ + WR Drawdow n = Training Resourcing

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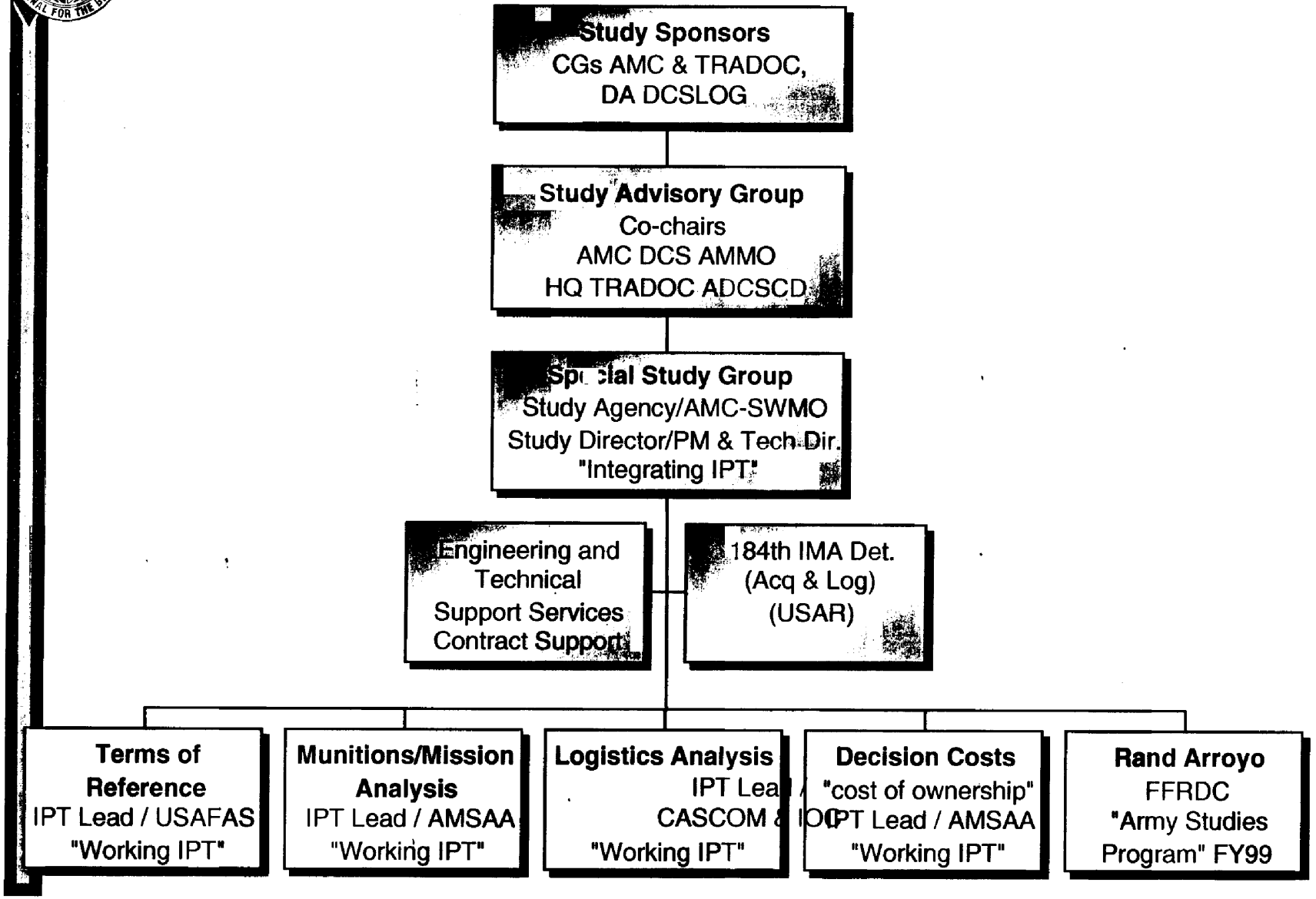
Precision Munitions/Logistics Study Broad Study Questions

- **Given the warfighting strategies of Force XXI and Army After Next, what are all** logistics impacts **that result in the use of precision munitions [heavy mix] versus the use of non-precision munitions [only]?**
- **Given these logistics impacts, what are the resulting possible implications on Army force modernization strategy and Army** force composition? **What are those costs?**
- **What are the true burdens (deltas in logistics) of precision munitions versus non-precision munitions across all combat, combat support, CSS** force structure, and O&S? **What are those costs?**
- **For the decided upon scenario, time frame, and weapon mixes, determine the level of investment and** cost comparisons **to acquire and sustain a realistic a mix of precision munitions and non-precision munitions?**

PMLS Organization



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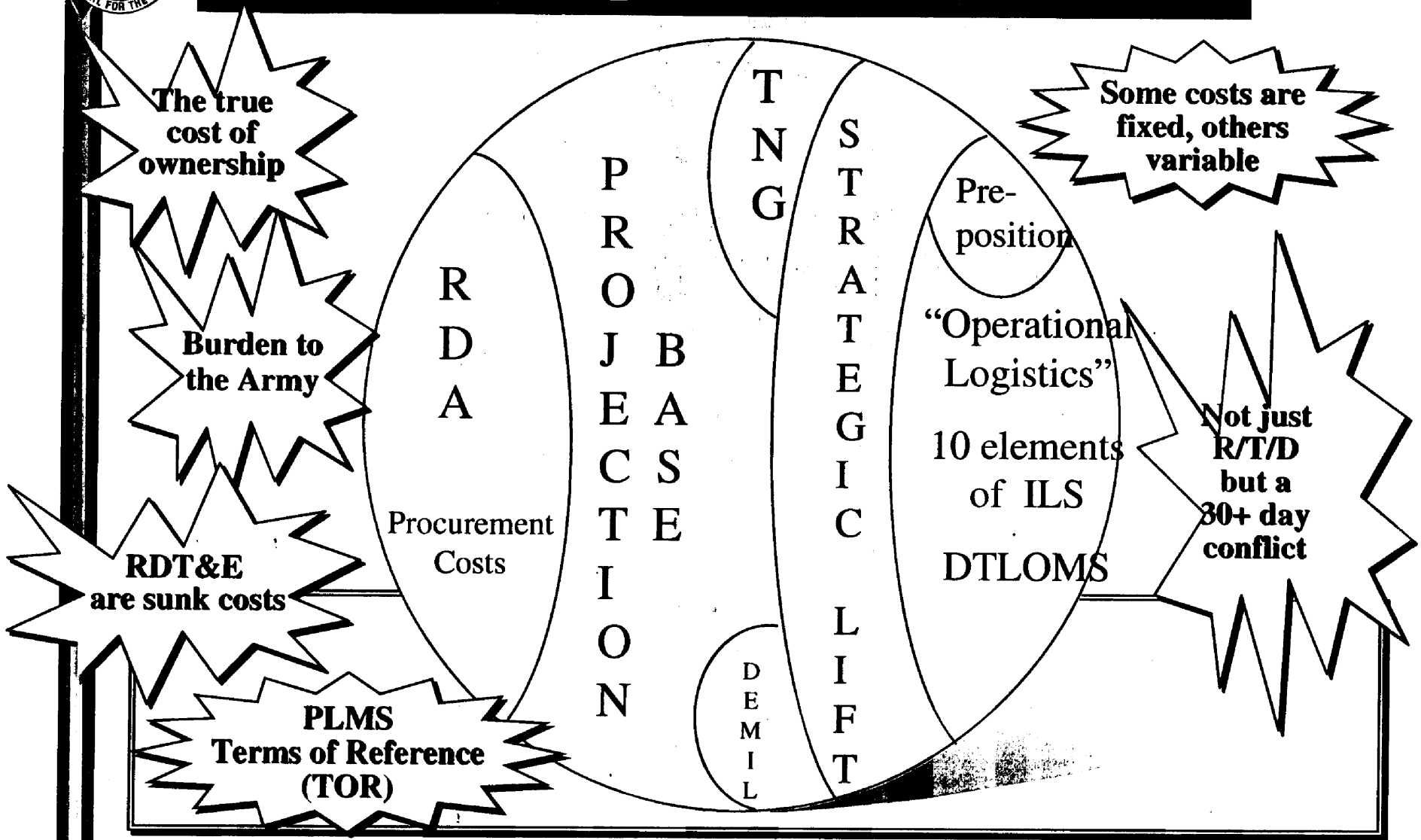
PMLS Conventional and Precision Munition Candidates (12)

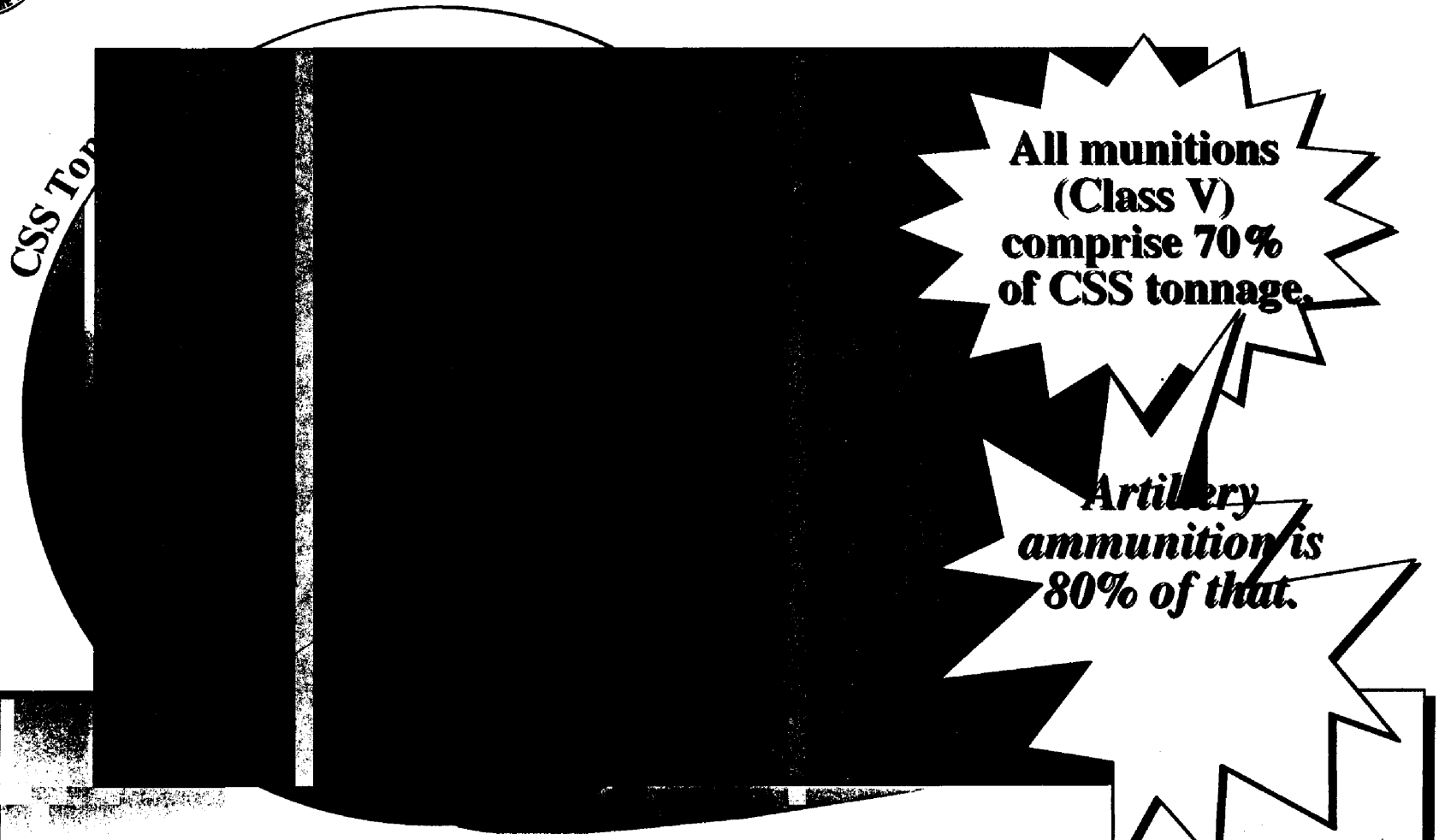
Target Description	Current / Conventional Munition	Next Generation Precision Munition	PMLS Comments/Benefits
Bunkers, soft targets	Bunker Defeat Munition	PGMM, 120mm	Provides urban combat capability, extends range and precision
Anti-armor	Family of 120mm tank main gun ammo	Tank extended range munition TERM	Increased survivability by engaging targets in defilade
All targets	*155mm, DPICM base bleed, M864*	*ER XM982 DPICM / SADARM*	Improves range for counter battery
Bunkers	*155mm, HE w/delay fuze*	*ER XM983 HE delayed fuze*	Bunker engagement
Counter Battery	*155mm, DPICM*	*XM898 PI SADARM*	More efficient counter battery killer
All targets	*155mm, DPICM*	*155mm, Low Cost Competent Munition (LCCM) Fuze/GPS on M864 / M483*	Provides accurate registration Improves target engagement Reduces munition requirements
All targets but heavy armor	*MLRS DPICM, XM85*	*MLRS DPICM Extended range with GPS guidance*	Extends range and significantly Improves accuracy
Anti-armor	*No current in-direct rocket launched capability*	*MLRS MSTAR*	MSTAR kills ACV targets deeper Diminishes intensity of close fight Improves force survivability
All targets but heavy armor	*ATACMS APAM*	*ATACMS IA GPS*	Accuracy independent of range
Anti-armor and High Value targets	*No current in-direct missile launched deep capability*	*ATACMS II / BAT P3I*	Kills High Value targets deep, improves force survivability
Soft point targets and bunkers	Hydra 70, and sometimes Hellfire II (LSA)	Advanced Precision Kill Weapon System (APKWS) (LSA)	Reduces rocket requirements Reduces collateral damage
Heavy armor targets and threat air defense systems	Hellfire II (LSA)	Apache Longbow (MMW)	Enhanced platform survivability Provides all weather capability

Weapon System & Ammunition Logistics Footprint



Elements of the Ammo Log Footprint Equation

Most Likely Area of Impact



The opportunity exists for Artillery Precision Munitions to impact 56% of CSS tonnage.

Precision Munitions and Logistics Study (PMLS) Synopsis

- Quantify deltas in cost of ownership**/burden to the Army between current conventional non-precision munitions and future precision munitions, across the total logistics footprint and in battlefield performance**
- Draw from previous and ongoing **effectiveness, warfighting, and logistic analyses (WARREQ, IOC Rock Drills, Crusader Ammunition Supply Study, etc.)**
- **Identify and quantify** value of Revolution in Military Logistics **(RML) between conventional and precision munitions**
- **Develop data, findings, conclusions, and recommendations for decision makers** for the POM 02-07 process **in FY 99**

Summary

Imperatives:

- **Reduce Cost of Ammunition**
  - ✓ Production
  - ✓ Storage / Maintenance
  - ✓ Demilitarization
- **Maintain Readiness**
  - ✓ Replenishment Capacity
  - ✓ Ability to Produce Future Requirements

PMLS Study!